Downy Mildews effect on Pickling Cucumber Growers in Michigan

Michigan leads the nation in pickling cucumber production and is considered a low cost producer. In 2006 there were 38,500 acres of pickling cucumber acres planted in Michigan with a farm value of \$30,643,000 according to the USDA NASS.

Downy Mildew blew into the state in 2005 in the month of August with about a third of the crop remaining to be harvested. At that time downy was earlier confirmed all along the east coast of the country. In 2006 the disease was confirmed around June 9th in Michigan with no other confirmations of the disease north of Georgia at time, which leads us to believe the cause of the outbreak at such an early stage in Michigan was caused from early transplants that were infected in a green house environment.

During the beginning of June the pickling cucumber acreage is just starting to be planted with little or no emergence. Since the downy mildew was present in Michigan so early this year the growers had to spray on a 5 to 7 day schedule on 100% of the pickling acreage.

The cost of downy mildew control in 2006 was approximately \$5 million dollars for the pickle growers in Michigan. This amounts to over 16% of their gross revenue and this cost is taken directly from their net income. The graph below shows the cost escalates rapidly for each week the crop is sprayed. The emergence of the disease on transplants cost Michigan growers an estimated \$3 million dollars in 2006 when compared to only having to spray starting mid August, as in 2005. Put another way, if we can delay the onset of the disease for 1 month we can eliminate half the chemical cost to our industry.

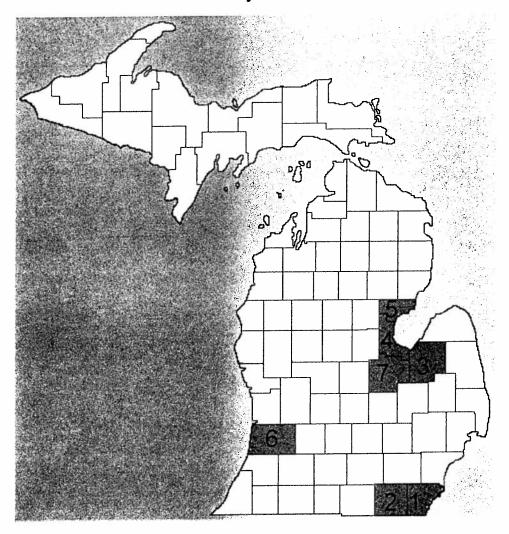
\$6,000,000 \$4,000,000 Value \$3,000,000 \$1,000,000 \$1,000,000 \$0 Week Week

Downy Mildew Accumulative Spray Cost by Week in Michigan

Chemical costs are only one part of the equation. Growers experienced significant yield loss on acreage that was not sprayed in a timely manner. Some growers lost one third of their crop while still having the extra chemical costs.

2007 is shaping up to be a tough year for pickling cucumber industry in Michigan with the extra costs of downy mildew control, potential yield loss and the increased risk of producing the crop is pushing growers to switch to grain where the markets are more favorable and less risky.

Confirmed downy mildew reports in Michigan as of July 25, 2006



1. Monroe County

June 9, 2006

2. Lenawee County July 19, 2006

3. Tuscola County July 24, 2006

4. Bay County

July 24, 2006

5. Arenac County July 24, 2006

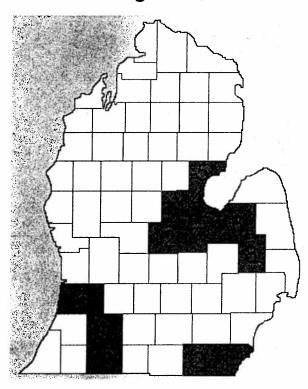
6. Allegan County

July 25, 2006

7. Saginaw County

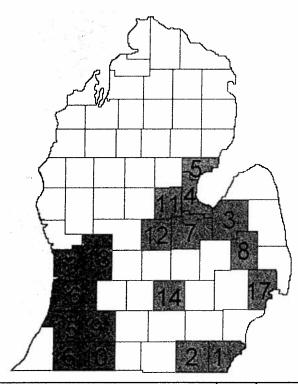
July 25, 2006

Confirmed downy mildew reports in Michigan as of August 1, 2006



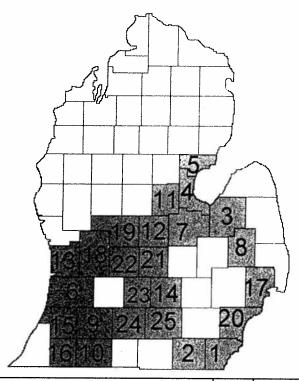
1	Monroe Co.	6/9 cucumber	7/27 cantaloupe
2	Lenawee Co.	7/19 cucumber	7/27 cantaloupe
3	Tuscola Co.	7/24 cucumber	7/27 winter squash
4	Bay Co.	7/24 cucumber	
5	Arenac Co.	7/24 cucumber	
6	Allegan Co.	7/25 cucumber	
7	Saginaw Co.	7/25 cucumber	
8	Lapeer Co.	7/27 cucumber	
9	Kalamazoo Co.	7/28 cucumber	
10	St. Joseph Co.	7/28 cucumber	
11	Midland Co.	8/1 cucumber	
12	Gratiot Co.	8/1 cucumber	

Confirmed downy mildew reports in Michigan as of August 10, 2006



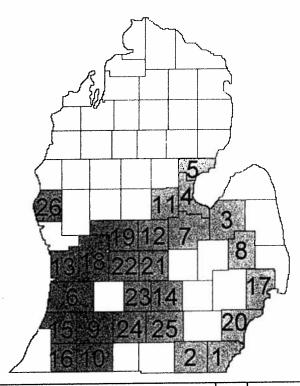
1	Monroe Co.	6/9 cucumber	7/27 cantaloupe	18	Kent Co.	8/10 cucumber
2	Lenawee Co.	7/19 cucumber	7/27 cantaloupe			
3	Tuscola Co.	7/24 cucumber	7/27 winter squash			
4	Bay Co.	7/24 cucumber				
5	Arenac Co.	7/24 cucumber				
6	Allegan Co.	7/25 cucumber				
7	Saginaw Co.	7/25 cucumber				
8	Lapeer Co.	7/27 cucumber				
9	Kalamazoo Co.	7/28 cucumber				
10	St. Joseph Co.	7/28 cucumber				
11	Midland Co.	8/1 cucumber				
12	Gratiot Co.	8/1 cucumber				
13	Ottawa Co.	8/4 cucumber				
14	Ingham Co.	8/4 cucumber				
15	Van Buren Co.	8/4 cucumber				
16	Cass Co.	8/8 cucumber				
17	Macomb Co.	8/9 cucumber	8/9 cantaloupe			

Confirmed downy mildew reports in Michigan as of August 17, 2006



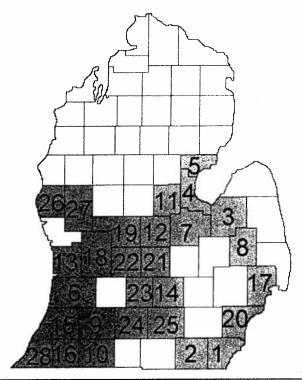
1	Monroe Co.	6/9 cucumber	7/27 cantaloupe	18	Kent Co.	8/10 cucumber
2	Lenawee Co.	7/19 cucumber	7/27 cantaloupe	19	Montcalm Co.	8/11 cucumber
3	Tuscola Co.	7/24 cucumber	7/27 winter squash 8/11 cantaloupe	20	Wayne Co.	8/14 cucumber
4	Bay Co.	7/24 cucumber		21	Clinton Co.	8/16 cucumber
5	Arenac Co.	7/24 cucumber		22	Ionia Co.	8/17 cucumber
6	Allegan Co.	7/25 cucumber		23	Eaton Co.	8/17 cucumber
7	Saginaw Co.	7/25 cucumber		24	Calhoun Co.	8/17 cucumber
8	Lapeer Co.	7/27 cucumber		25	Jackson Co.	8/17 cucumber
9	Kalamazoo Co.	7/28 cucumber				
10	St. Joseph Co.	7/28 cucumber				
11	Midland Co.	8/1 cucumber				
12	Gratiot Co.	8/1 cucumber				
13	Ottawa Co.	8/4 cucumber				
14	Ingham Co.	8/4 cucumber				
15	Van Buren Co.	8/4 cucumber				
16	Cass Co.	8/8 cucumber				
17	Macomb Co.	8/9 cucumber	8/9 cantaloupe			

Confirmed downy mildew reports in Michigan as of August 30, 2006



1	Monroe Co.	6/9 cucumber	7/27 cantaloupe	18	Kent Co.	8/10 cucumber
2	Lenawee Co.	7/19 cucumber	7/27 cantaloupe	19	Montcalm Co.	8/11 cucumber
3	Tuscola Co.	7/24 cucumber	7/27 winter squash 8/11 cantaloupe	20	Wayne Co.	8/14 cucumber
4	Bay Co.	7/24 cucumber		21	Clinton Co.	8/16 cucumber
5	Arenac Co.	7/24 cucumber		22	Ionia Co.	8/17 cucumber
6	Allegan Co.	7/25 cucumber		23	Eaton Co.	8/17 cucumber
7	Saginaw Co.	7/25 cucumber		24	Calhoun Co.	8/17 cucumber
8	Lapeer Co.	7/27 cucumber		25	Jackson Co.	8/17 cucumber
9	Kalamazoo Co.	7/28 cucumber		26	Oceana Co.	8/28 cucumber
10	St. Joseph Co.	7/28 cucumber				
11	Midland Co.	8/1 cucumber		ļ		
12	Gratiot Co.	8/1 cucumber				
13	Ottawa Co.	8/4 cucumber				
14	Ingham Co.	8/4 cucumber				
15	Van Buren Co.	8/4 cucumber				
16	Cass Co.	8/8 cucumber				
17	Macomb Co.	8/9 cucumber	8/9 cantaloupe			

Confirmed downy mildew reports in Michigan as of September 6, 2006



Monroe Co.	6/9 cucumber	7/27 cantaloupe	18	Kent Co.	8/10 cucumber
Lenawee Co.	7/19 cucumber	7/27 cantaloupe	19	Montcalm Co.	8/11 cucumber
Tuscola Co.	7/24 cucumber	7/27 winter squash 8/11 cantaloupe	20	Wayne Co.	8/14 cucumber
Bay Co.	7/24 cucumber		21	Clinton Co.	8/16 cucumber
Arenac Co.	7/24 cucumber		22	Ionia Co.	8/17 cucumber
Allegan Co.	7/25 cucumber		23	Eaton Co.	8/17 cucumber
Saginaw Co.	7/25 cucumber		24	Calhoun Co.	8/17 cucumber
Lapeer Co.	7/27 cucumber		25	Jackson Co.	8/17 cucumber
Kalamazoo Co.	7/28 cucumber		26	Oceana Co.	8/28 cucumber
St. Joseph Co.	7/28 cucumber		27	Newago Co.	8/31 cucumber
Midland Co.	8/1 cucumber		28	Berrien Co.	9/5 cucumber
Gratiot Co.	8/1 cucumber				
Ottawa Co.	8/4 cucumber				
Ingham Co.	8/4 cucumber				
Van Buren Co.	8/4 cucumber				
Cass Co.	8/8 cucumber				
Macomb Co.	8/9 cucumber	8/9 cantaloupe			
	Lenawee Co. Tuscola Co. Bay Co. Arenac Co. Allegan Co. Saginaw Co. Lapeer Co. Kalamazoo Co. St. Joseph Co. Midland Co. Gratiot Co. Ottawa Co. Ingham Co. Van Buren Co. Cass Co.	Lenawee Co. 7/19 cucumber Tuscola Co. 7/24 cucumber Bay Co. 7/24 cucumber Arenac Co. 7/24 cucumber Allegan Co. 7/25 cucumber Saginaw Co. 7/25 cucumber Lapeer Co. 7/27 cucumber Kalamazoo Co. 7/28 cucumber St. Joseph Co. 7/28 cucumber Midland Co. 8/1 cucumber Gratiot Co. 8/1 cucumber Ottawa Co. 8/4 cucumber Ingham Co. 8/4 cucumber Van Buren Co. 8/4 cucumber Cass Co. 8/8 cucumber	Lenawee Co. 7/19 cucumber 7/27 cantaloupe Tuscola Co. 7/24 cucumber 7/27 winter squash 8/11 cantaloupe Bay Co. 7/24 cucumber Arenac Co. 7/24 cucumber Allegan Co. 7/25 cucumber Saginaw Co. 7/25 cucumber Lapeer Co. 7/27 cucumber Kalamazoo Co. 7/28 cucumber St. Joseph Co. 7/28 cucumber Midland Co. 8/1 cucumber Gratiot Co. 8/1 cucumber Ottawa Co. 8/4 cucumber Ingham Co. 8/4 cucumber Van Buren Co. 8/8 cucumber Cass Co. 8/8 cucumber	Lenawee Co. 7/19 cucumber 7/27 cantaloupe 19 Tuscola Co. 7/24 cucumber 7/27 winter squash 8/11 cantaloupe 20 Bay Co. 7/24 cucumber 21 Arenac Co. 7/24 cucumber 22 Allegan Co. 7/25 cucumber 23 Saginaw Co. 7/25 cucumber 24 Lapeer Co. 7/27 cucumber 25 Kalamazoo Co. 7/28 cucumber 26 St. Joseph Co. 7/28 cucumber 27 Midland Co. 8/1 cucumber 28 Gratiot Co. 8/1 cucumber 10 Ottawa Co. 8/4 cucumber 10 Van Buren Co. 8/4 cucumber 10 Cass Co. 8/8 cucumber 10	Lenawee Co. 7/19 cucumber 7/27 cantaloupe 19 Montcalm Co. Tuscola Co. 7/24 cucumber 7/27 winter squash 8/11 cantaloupe 20 Wayne Co. Bay Co. 7/24 cucumber 21 Clinton Co. Arenac Co. 7/24 cucumber 22 Ionia Co. Allegan Co. 7/25 cucumber 23 Eaton Co. Saginaw Co. 7/25 cucumber 24 Calhoun Co. Lapeer Co. 7/27 cucumber 25 Jackson Co. Kalamazoo Co. 7/28 cucumber 26 Oceana Co. St. Joseph Co. 7/28 cucumber 27 Newago Co. Midland Co. 8/1 cucumber 28 Berrien Co. Gratiot Co. 8/4 cucumber 1 Ingham Co. 8/4 cucumber Van Buren Co. 8/4 cucumber 2 Ingham Co. 8/8 cucumber